

## **REMARKS**

Claims 1 through 17, 19 through 35, 37 through 53, 55 through 58, 60 through 71, and 73 are pending in this application. Applicants propose amending claims 1, 5-17, 19, 23-35, 37, 41-53, 55, 60-71, and 73. Support for the amendments may be found, for example, at paragraphs [0110] through [0119] of the application. No new matter has been added. Applicants propose canceling claims 2-4, 20-22, 38-40, and 56-58.

### ***Interview Summary***

The undersigned wishes to thank Examiner Sajeda for granting the telephonic interview of March 3, 2009. During that interview, the undersigned presented amendments and arguments substantially consistent with those presented herein. Examiner Sajeda agreed to give further consideration to the arguments upon receipt of a written response.

### ***Rejections Under 35 U.S.C. § 103(a)***

Claims 1-2, 4-5, 8, 17, 19-20, 22-23, 26, 35, 37-38, 40-41, 44, 53, 55-56, 58, 62, 71, and 73 stand rejected under 35 U.S.C. § 103(a) as allegedly being anticipated by U.S. patent 6,744,451 (hereinafter “Anderson”) in view of U.S. patent 5,825,675 (hereinafter “Want”).

Claims 3, 7, 21, 25, 39, 43, 57, and 61 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 6,122,033 (hereinafter “E. Anderson”).

Claims 6, 24, 42, and 60 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 6,336,052 (hereinafter “Ouellet”).

Claims 9, 27, 45, and 63 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 6,968,215 (hereinafter “Muramatsu”).

Claims 10-11, 28-29, 46-47, and 64-65 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 7,146,005 (hereinafter “Anft”).

Claims 12-15, 30-33, 48-51, and 66-69 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 6,559,831 (hereinafter “Armstrong”).

Claims 16, 34, 52, and 70 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Anderson and Want in view of U.S. patent 6,703,550 (hereinafter “Chu”).

Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Claim 1 recites:

A user interface system, said system comprising a plurality of logical buttons and their physical equivalents, **said physical equivalents being arranged symmetrically in a multi-dimensional manner, a subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis,**

wherein a first subset of said physical equivalents is mapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement,

wherein a second subset of said physical equivalents is mapped to correspond to asymmetrical logical buttons having functionality unrelated to each other,

**wherein upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and**

**wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other.**

In order for a prior art reference to anticipate this claim, or a set of references to render it obvious, the recited language and its combination in the recited arrangement must be taught by the prior art. The undersigned respectfully submits that the cited references do not teach

the emphasized language and therefore cannot possibly teach or even suggest the recited combination.

Anderson discloses a selection system with audible cues to allow a user of a handheld computer system to locate a desired item from a list. (Col. 1, ll. 45-47). The system uses two different inputs associated with two different letter subsets: A to M and N to Z. (Col. 1, ll. 50-52). In connection with Figure 6d, a handheld computer may appear in a scroll state 550. (Col. 9, ll. 13-29). In the scroll state, the user may scroll up or down using buttons 636 and 633. (Col. 9, ll. 13-29). After the user has selected a particular entry from the displayed list, the user may open the selected entry by pressing button 612, or 625. (Col. 9, ll. 13-29). Alternatively, the user can exit the fast lookup by selecting button 611 or 624 associated with exiting. (Col. 9, ll. 13-29).

In contrast with the claim 1, Anderson does not disclose or suggest a device wherein

**said physical equivalents being arranged  
symmetrically in a multi-dimensional manner, a subset of  
the physical equivalents arranged on a horizontal axis and a  
subset of the physical equivalents arranged on a vertical  
axis**

...

**wherein upon physical reorientation of the user  
interface system to a first position, the first subset of said  
physical equivalents is remapped to correspond to  
asymmetrical logical buttons having functionality unrelated  
to each other and the second subset of said physical  
equivalents is remapped to correspond to symmetrical  
logical buttons for either horizontal movement or vertical  
movement, and**

**wherein upon physical reorientation of the user  
interface system to a second position, the first subset of said  
physical equivalents is remapped to correspond to  
symmetrical logical buttons for either horizontal movement  
or vertical movement and the second subset of said physical  
equivalents is remapped to correspond to symmetrical  
logical buttons having functionality unrelated to each other.**

Indeed, Anderson makes no suggestion that the functionality of buttons 611, 612, 624, and 625 changes upon reorientation of the device.

Want discloses a hand-held computer with symmetrically placed buttons on one side so that left or right handed operation by the grasping hand is easily achieved. (Want at

Abstract). The hand-held computer includes a configuration method so that the functions of buttons and the orientation of images on the display screen can be adjusted for left or right handed use of the computer. (Want at Abstract).

In connection with Figure 4A, Want discloses three buttons 384, 386, and 388 located vertically along the side of the computing device wherein the buttons are given the functions of “UP,” “SELECT,” and “DOWN” respectively. Button 384 is used to move selection box 390 upwards through the menu items and button 388 is used to move selection box 390 downwards in the menu selection. (Want at Col. 7, ll. 21-25). Depressing button 386 will select the current menu item enclosed in selection box 390. (Want at Col. 7, ll. 34-35).

In connection with Figure 4B, Want explains the buttons 384, 386, and 388 perform the same functions, except that the functions assigned to buttons 384 and 388 have been switched. In Figure 4B, button 388 performs the “up” function while button 384 performs the “down” function. Button 386 has the same function in both configurations.

Thus, Want discloses a device with three buttons *arranged vertically* along a side of the device wherein the functionality assigned to two of the buttons is reversed depending upon the orientation of the device. But in contrast with claim 1, Want does not disclose or suggest

said physical equivalents being arranged  
symmetrically in a multi-dimensional manner, a subset of  
the physical equivalents arranged on a horizontal axis and a  
subset of the physical equivalents arranged on a vertical  
axis

...

wherein upon physical reorientation of the user  
interface system to a first position, the first subset of said  
physical equivalents is remapped to correspond to  
asymmetrical logical buttons having functionality unrelated  
to each other and the second subset of said physical  
equivalents is remapped to correspond to symmetrical  
logical buttons for either horizontal movement or vertical  
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wherein upon physical reorientation of the user  
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physical equivalents is remapped to correspond to  
symmetrical logical buttons for either horizontal movement  
or vertical movement and the second subset of said physical

equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other.

Rather, Want discloses three buttons, *all of which are arranged vertically*. In other words, the buttons in Want are arranged in a *single dimension* and not “in a *multi-dimensional manner, a subset of the physical equivalents arranged on a horizontal axis and a subset of the physical equivalents arranged on a vertical axis.*” Therefore, because the physical buttons in Want are arranged in a *single dimension*, Want cannot possibly disclose:

wherein upon physical reorientation of the user interface system to a first position, the first subset of said physical equivalents is remapped to correspond to asymmetrical logical buttons having functionality unrelated to each other and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement, and

wherein upon physical reorientation of the user interface system to a second position, the first subset of said physical equivalents is remapped to correspond to symmetrical logical buttons for either horizontal movement or vertical movement and the second subset of said physical equivalents is remapped to correspond to symmetrical logical buttons having functionality unrelated to each other.

E. Anderson discloses an apparatus for changing operating modes of an image capture device. (Abstract). E. Anderson discloses a camera 110 comprising an LCD screen 402, a four way navigation control button 409, and a shutter button 418. (Col. 5, ll. 23-25). The four way navigation control button 409 provides the user interface with four buttons: left/right buttons 410a and 410b, which have a horizontal orientation; and up/down buttons 411a and 411b, which have a vertical orientation. (Col. 5, ll. 25-32). In connection with Figure 7, E. Anderson describes that the user may scroll through the full-sized images in the LCD screen 402 using the left/right buttons 410. (Col. 6, ll. 45-48). When the camera has a plurality of operating modes, the user can access a mode from another operating mode by pressing the vertical navigation buttons 411a and 411b. (Col. 7, ll. 1-3).

Thus, E. Anderson discloses a four button user interface wherein two horizontally oriented buttons 410a, 410b are used to scroll through images and the vertically oriented buttons 411a, 411b are used to move between modes of operating the device. In contrast with claim 1, E. Anderson does not disclose a device wherein

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symmetrically in a multi-dimensional manner, a subset of  
the physical equivalents arranged on a horizontal axis and a  
subset of the physical equivalents arranged on a vertical  
axis**

...  
**wherein upon physical reorientation of the user  
interface system to a first position, the first subset of said  
physical equivalents is remapped to correspond to  
asymmetrical logical buttons having functionality unrelated  
to each other and the second subset of said physical  
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**wherein upon physical reorientation of the user  
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equivalents is remapped to correspond to symmetrical  
logical buttons having functionality unrelated to each other.**

Indeed, E. Anderson does not appear to suggest that the functionality of buttons 410a, 410b, 411a, and 411b is remapped when the interface is reoriented. E. Anderson certainly does not disclose remapping as described in the claim.

The remaining references similarly fail to teach or suggest the emphasized claim language as well.

Thererfore, because Anderson, Want, and E Anderson, and the remaining references fail to disclose the emphasized claim language, they cannot be said to anticipate or even render obvious the recited combination of claim 1. While the language of the remaining independent claims 19, 37, 55, and 73 is different, for reasons analogous to those described above, these claims are likewise neither anticipated nor rendered obvious. Furthermore, all

pending dependent claims are likewise patentable for being dependent upon a non-obvious independent claim.

Applicants note that each of the claims recites language other than that discussed above that further defines over the cited references. For example, claim 55 further recites that the recited language applies to a “four-button diamond arrangement, a first pair of the four button diamond arrangement arranged on a horizontal axis and a second pair of the four button diamond arrangement arranged on a vertical axis.” The cited references do not disclose the recited features in the context of “a four-button diamond arrangement.” For this additional reason, claim 55 defines from the cited references.

Reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102, 103 is respectfully requested.

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**PATENT**

### **CONCLUSION**

The undersigned respectfully submits that pending claims are allowable and the application in condition for allowance. A Notice of Allowance is respectfully solicited.

Examiner Muhebbulah is invited to call the undersigned in the event a telephone interview will advance prosecution of this application.

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